DOCUMENT RESUME

ED 118 776 CE 006 303

AUTHOR Russell, Earl B., Ed.; White, Michael R., Ed.
TITLE Enhancing the Role of Vocational Education Administrators as Change Agents. Report of Statewide Conference, April 20, 1972, Atlanta, Georgia.
INSTITUTION Georgia State Dept. of Education, Atlanta. Office of Instructional Services.
REPORT NO VT-102-490
PUB DATE 20 Apr 72
NOTE 89p.; Appendix A, "Educational Change--A Strategy for Study and Action," by John I. Goodlad, has been deleted because it is copyrighted

EDRS PRICE MF-$0.83 HC-$4.67 Plus Postage
DESCRIPTORS *Administrator Role; *Change Agents; Change Strategies; Conference Reports; *Educational Change; *Educational Innovation; Questionnaires; Vocational Directors; *Vocational Education
IDENTIFIERS Georgia

ABSTRACT

The document contains the proceedings of a Statewide conference on enhancing the role of vocational education administrators as change agents. Conference topics included: "How Administrators Can Overcome Barriers to Educational Change," Henry M. Brickell; "Why Educational Innovations Fail and How They can be More Effectively Implemented," Neal Gross; "Strategies for Change in Vocational Education in Georgia," Earl B. Russell; and "Key Elements for Change in Vocational Education in Georgia: A Synopsis," Gene Bottoms. Appended are: the questionnaire which deals with strategies for change and a summary of the data. A bibliography is also included. (LJ)

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SEP 03 1975 /A3

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ENHANCING THE ROLE OF VOCATIONAL EDUCATION ADMINISTRATORS AS CHANGE AGENTS

A Report of a Statewide Conference
on April 20, 1972
Atlanta, Georgia

Edited by

Earl B. Russell

and

Michael R. White

U.S. DEPARTMENT OF HEALTH
EDUCATION & WELFARE
NATIONAL INSTITUTE OF
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State Department of Education
Office of Instructional Services
Division of Adult and Vocational Education
State Office Building
Atlanta, Georgia 30334

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VT 102490

PREFACE

Our desire in the State Division of Vocational Education to make the proceedings of this particular conference available to the profession is a measure of the importance of the theme and of the quality and variety of perspectives shared by the speakers. "Enhancing the Role of Vocational Education Administrators as Change Agents," the conference theme, was also the goal of the conference. Hopefully, we will get even closer to our goal by making this report available to those who attended the conference, as well as to other interested individuals and agencies. For many this report could be a valuable reference.

Acknowledgment is given to the many individuals who contributed in so many ways to the success of the conference. In particular, appreciation is due to: Dr. G. Herbert True, President of TEAM International, South Bend, Indiana, for his provocative multi-media presentation at the beginning of the conference. The highly visual nature of his address made it impossible to meaningfully capture his address in writing; to Dr. George L. O'Kelley of the University of Georgia; Dr. Henry M. Brickell of the Institute for Educational Development, New York City; Dr. Neal Gross of the University of Pennsylvania; Dr. Earl B. Russell of Ohio State University and formerly of the University of Georgia; and Dr. Gene Bottoms of the Georgia Department of Education for their insightful presentations.

Also, gratitude is expressed to Dr. Russell for his planning of the conference and securing speakers. He and Michael R. White, also of Ohio State University and formerly of the University of Georgia, deserve special recognition for their compiling and editing of this report.

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CONFERENCE INTRODUCTION

by

George L. O'Kelley, Jr.*

The quarterly planning and professional development conference for vocational education leadership personnel in local systems, state technical schools, State Department of Education, and teacher education programs has proved to be a challenging and thoroughly rewarding enterprise during the past few years. Participants have not only come to know each other better but in the process have developed a self identity and a better understanding of interrelationships within the total program of vocational education.

The opportunity of meeting together again for planning and exchange of ideas is particularly appealing at this stage of development in the school year. The agreed upon conference format of approximately equal time devoted to the consideration of administrative planning and professional development as staff members will be continued during this conference. Also, it is good to keep our philosophical perspective in balance and in mind as we attempt to order our administrative plans.

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*Dr. O'Kelley is Chairman, Division of Vocational Education, College of Education, University of Georgia, Athens, Georgia 30601.

We in vocational teacher education at the University of Georgia are particularly pleased to have been asked to assume certain responsibilities in planning and arranging for the professional development phase of this particular conference. We think a good program has been planned and that you will enjoy and appreciate it.

It has been said that educational program change runs in cycles and that too often a so called "new program" is nothing more than a long familiar approach with a new name or label affixed. It is certainly true that we speak a language all our own and the term "educationese" may be deserved. There is no doubt that in recent years, when proposal writing to Washington has become commonplace, a few words or terms have become quite popular. In the minds of some their use is an absolute requirement if a proposal has a chance of receiving official funding approval during the period of the "in words" or terms.

Some of these words rate as a passing fad only, but some tend to hang on for awhile because of the intellectual stimulation their use seems to engender. To me provocative terms of recent years are "innovation", "educational change", and "change agent". These seem to grip the thought processes and force one to think just a little bit out of the routine regarding meaning, implementation, and so forth. I like their sound as well as connotation.

During today's meeting we plan to deal with change, environment for change, and change strategy. However, I sense

a need for some caution as well as forthrightness on our part as we become involved in these discussions. The caution suggested refers to the ever-present tendency to jump to conclusions regarding application without fully understanding the problem itself.

Almost everyone supports change--some for the sake of change itself. As a matter of fact, everyone of us here--directors, administrators, superintendents, coordinators, teachers, and teacher educators are change agents whether or not we so describe our jobs. By no means, however, are we equally understanding of the process by which change occurs or is induced to occur. Neither does it follow that we are prepared to direct the change process itself. In other words, just being committed to change does not impart any competency to deal with the change process, per se.

Most teachers are committed to the teaching-learning process and many spend long hours working toward the intelligent implementation of the process. Many teachers work and study toward perfecting and refining their teaching procedures or mechanics without first trying to understand basic learning theory itself. In addition, I rather suspect only a small fraction of most teachers' time devoted to the improvement of teaching is directed toward understanding the learning process. I am equally convinced that if more of us who teach were to spend a fraction of the time now devoted toward professional improvement in general to a sincere effort to understand fully the learning process, both we as individuals and the

profession as a whole would profit immeasurably.

It is my hope that we now adopt this same attitude toward involvement in the change process. Before we become too deeply immersed in any mass effort to force change, let us first try as individual members of the vocational education profession to become basically informed regarding the change process itself. We do not need to "rediscover the wheel," but neither do we need, out of sheer ignorance, violate every principle relating to the process which systematic research and intelligent review have already established and vindicated. Let us devote this day to basic preparation for becoming actively involved in bringing about needed change in the actions and attitudes of people in vocational education in Georgia. We have some exceedingly well prepared and informed consultants scheduled to lead us. It is a rare opportunity which we should not allow to pass unexploited.

HOW ADMINISTRATORS CAN OVERCOME BARRIERS TO EDUCATIONAL CHANGE

by

Henry M. Brickell*

Local school systems, state education departments, and colleges and universities are similar, as far as I understand them, in that they contain both barriers and opportunities for change in local public schools, state departments, and colleges and universities. Parents and citizen groups do not exert a direct influence on the adoption of new kinds of instructional programs most of the time. But their influence is decisive if exerted. Most parents do not know enough about educational methods to favor a specific innovation. But if for some reason the public develops an interest in a particular innovation like career education, lookout! It will probably come to life in the local classroom.

What needs to be done is to prevent public opposition. It is not necessary to arouse public enthusiasm in order to bring about a change. Is the public an anchor, holding back an ambitious, restless, aggressive profession? No! There might have been a time back in the 1930's when movements in

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*Dr. Brickell is Director of Studies, Institute for Educational Development, 52 Vanderbilt Avenue, New York, New York 10017.

education were impeded somewhat by the public, but there is a pretty good match today between what the public expects and what the profession is ready to give. A kind of self-selection process goes on between the professionals and the community. If the community does not expect much, the profession is not willing to deliver much.

The board of education in most communities, like the public, is not a strong agent in determining the path of innovation. Once again, its influence is decisive if exerted. You must disseminate the programs in a manner that will not arouse the opposition of the board of education. Many board members are only vaguely aware of new instructional developments because they are paying attention to other things. If the board does not have some specific interest in improvement and innovation, it may at least create a climate that makes change easier to bring about.

THE KEY POSITION OF THE ADMINISTRATOR

The most clear cut finding in my own studies of educational change, and these are generally supported, is that new instructional programs are introduced by administrators. Contrary to general opinion, teachers are not change agents for instructional innovations of major scope, that is, innovations that touch the work of more than one teacher. Now, I have been taught that if you have a favorable climate, a laissez faire atmosphere, if things are friendly and permissive, that you will get ferment, sprouts will develop, and you will

get change just by letting good conditions exist. That does not appear to be the case. Now I am not talking about changes in classroom practice, but about modifications that directly influence the work of groups of teachers.

Rearrangements of the basic structural pieces of the institution (what's taught, who teaches it, to whom, when, where)--those big blocks--depend almost entirely on administrative initiative. Even in the best of circumstances for the expression of faculty ideas, teachers seldom suggest distinctly new kinds of working practices for themselves. The teacher is not, and does not act like, an independent professional, a private entrepreneur, free to decide what to teach, when to teach it, to whom, and so on. He is instead a member of the staff of a very stable institution where his behavior affects his position. He cannot be understood as a private entrepreneur, an individual professional, or approached that way. He is set in an institutional framework.

The reason the administrator is powerful is because he can marshall the necessary authority, if not the necessary leadership, to precipitate the decision to change the institution. This fact we continue to disguise very heavily. I suppose ninety-five percent of the administrators I have dealt with say that they do use, in bringing about change, democratic administration, the "team" approach, full staff involvement. The other five percent are honest!

The participation patterns that are very widely used are often little more than enabling arrangements to persuade the

staff to go off in a direction that has been at least partly pre-selected. The administrator often thinks he is most successful when he can say, "You know, they think they thought of this themselves!"

Now, the control center of the institution, as schools are managed today, is the administrator. He may not be, and often is not, the source of the idea for major-scope change, but its entry is absolutely dependent upon his endorsement--he has to smile upon it, he has to like it, he has to actively favor it. He cannot just let it happen. There is no way to give away involvement. If administrators do not favor the change, they do not get it.

TEACHER-CONTROLLED CHANGE

There are three kinds of change that appear to me that teachers should make in the absence of administrative initiative:

1) Change in Classroom Practice. Anything the teacher is able to do without disturbing the work of other teachers, she or he can do alone. Simple administrative permission is sufficient.

2) Relocating Existing Curriculum Content. If the industrial arts program in the middle school years (7-9 or 6-8) needs revising, either where current material is not properly located, or something needs to be taught earlier or later, the teachers' committee, with a little administrative help, can often make those shifts in the sequence of topics.

3) The Introduction of a Single Special Course, at the High School Level Usually, at the End of the Sequence (in grade 11 and 12). Such a course taught by a single teacher does not affect the work of other teachers very much.

Varying classroom practice or varying the curriculum does not usually affect the work of other teachers. Beyond that, you need administrative participation to modify the system.

SUSPICION AS A BARRIER TO CHANGE

Few new instructional programs are invented in any school system. Most changes involve shifting to something that has been used elsewhere. Thus, it is important to recognize that professional suspicion about the value of innovations in other school systems, and even about the sincerity of some of the other innovators, is a widespread and very serious inhibitor of change. We suspect that many of the new programs we hear about are promises without substance--not much better than what was going on before, with little educational consequence. Sometimes, we suspect it might have been concocted by the local school or the administrator in an effort to gain some outside recognition.

One of the most satisfying experiences we can have, it seems, is to visit a novel program and discover that it is not better, and perhaps a little worse, than what we have been doing all along. I think a lot of visits are undertaken for the purpose of discovering that a program is no better than what we are already doing!

I have asked people for a long time what it takes to persuade them to adopt a program that is already in existence somewhere else. I have asked about speeches at professional

meetings where a man gets up and describes what he is doing. And what they say is, "That doesn't work very often." You put this man in the spotlight, on a platform, behind a microphone, and he tends to accentuate the positive. You cannot tell from what he is saying what the facts are. Put a drink in his hand after the meeting, in a private session, and he will tell you what the seedy side of the program is! He will tell you what is wrong with it as well as what is right. But the truth is not available on the platform. This morning is an exception, you understand that!

I have asked about professional articles and people say about the same thing. You are still "in public" and the descriptions you read about new programs tend to describe them almost all as successes. You do not get the shortcomings and cannot be persuaded fully by what is written about it.

Well, how about research reports? And the answers come back somewhat like this. "Education is very difficult to measure. Research reports are usually uncertain in their conclusions about the new program. If they were conclusive they tend to be matched by other research reports that are equally conclusive but in the opposite direction." And people say things like, "You can do anything with statistics." The research report behind a new program, for most people, is not persuasive.

What about talking to people who have done it themselves? The answer is, "That's pretty helpful." It is pretty good to talk to a guy who has already done it in his own school,

especially if he is a personal friend whose description you can trust.

I have often asked people to rank all the various ways to learn about a program. They are asked which ones are most persuasive--the speeches, the articles, talking to people who have done it, and so forth. The answer is, "We don't like any of those. What we would like to do is to get into the station wagon and drive over to the school where it is--walk past the principal's office, just briefly stop in the vocational administrator's office, then get into the classroom and watch it happen." If you can talk to the teacher after class, she will likely let her hair down and talk frankly about the program. If you can talk to students, that's even better.

Nothing persuades like an observation. The education profession is still at a very primitive stage. There was a time when farmers had to "see it to believe it." They could not take it from the experiment stations, they had to take it from the roads. We are way beyond that now in agriculture, but not in education.

Direct personal observation is still almost the only persuasive experience for educators who are considering whether to develop something or not. Now, let me caution you. If there are things abnormal, artificial, or unreal in the circumstances being observed, they may prevent the visitor from being persuaded. I would like to define those terms--abnormal, artificial, unreal. They mean "different from mine!" The educator from the rural county thinks he has to see programs

in places very much like his own. If his school is rural and isolated he does not think he can see programs in Atlanta and transplant them. He needs to see it being done in a place that looks like home or he tends to be unconvinced.

INTRODUCING CHANGE

I have talked a good bit about deciding whether or not to take on an innovation. I know that most changes are adoptions, not local inventions. Thus, I have talked about what influences adoption behavior. New programs can be introduced despite initial apathy or even opposition on the part of a number of teachers. Now, in vocational education, the number of teachers in a particular course for a subject field is very limited. This generalization is about cases when we have six to ten teachers. You do not have to have a unanimous vote before making a change in instructional planning. My observations have been that faculty members tend to prefer the new instructional arrangement within about four to twelve months after it has been introduced--pretty much regardless of their very early reactions.

Inadequacy vs. Resistance

Innovations do arouse feelings of insecurity and inadequacy in many teachers. Herb True talked about this earlier this morning. The more radical the change in the content or in method, the more likely the teachers are to feel insecure. It is important to distinguish feelings of doubt and inadequacy from resistance. They are <u>not</u> the same things. The early

questions people ask are "What's it like? What would it mean for me? How would I act? Could I swing it?" That is search behavior, that is probing to find out what the circumstances are. If you do not know how to listen to such talk, it will sound like, I'm not going to do it! You are not going to change me! I'll never make the change!"

Distinguishing between resistance and uncertainty, hesitancy, and doubt about personal ability to do it is important in helping teachers react to possible change. We like to tell each other case studies of programs that began in the central office of the vocational director and ended before they got into the classroom. But looking at many, many programs, I have found very few in which teachers attempted to sabatoge a program after it has been introduced. I have found, however, countless situations in which teachers had not been taught how to do it. Many more innovations are destroyed by inability than by reluctance. The key to successful innovation is help to the teachers in making the change.

Staff Development

Very frequently staff development is lacking. I spend a lot of time going into classrooms seeing things like discovery math programs. The teacher is up front with her Discovery Math Book and she says:

> Children, we will do exercise 4C. Grab your pencils and let's go! Okay, Charlie, what's the answer? Fourteen, no that's not the answer! Jane, what is it? Twelve, that's wrong. Pat, what is it? Seven. Seven is

> the answer. How many of you have seven on your paper? Okay, alright children, now that you have discovered the answer to 4C, let's discover the answer to 4D!

Unprepared teachers are too often mechanically using "popular" innovations. Our professional literature is shot through with worry about the rigidity of written curriculum guides and textbooks. It seems to me that the real source of rigidity in educational programs is not the existence of a written guide or book, but the existence of a teacher who does not know any more about it than the book does. He is constricted by it because it is the outer limit of what he knows--his only map to a foreign territory. If teachers are not taught more than they need to go through the motions of a new approach, they will tend to use it sluggishly and mechanically.

Evaluation

Evaluation is still in an extremely primitive state in this profession. The evaluator of the innovative instructional program even today is going into the classroom looking at the expressions on the faces of children! If they are smiling and the teacher seems satisfied, the conclusion is that the program is a success. More sophisticated techniques are rarely used. If the regular testing program or other evidence indicates no difference due to the change (that's what they usually show), it is concluded that no change occurred in the students. But if the kids are happy, and teachers like it, and there are no parent complaints, we generally conclude that the program is better.

You cannot depend on a local school system to generate evidence that its own innovative programs are better than what went on before them. Most changes are regarded by the local school as an improvement and it does not matter much what the change is. I have seen districts that have virtually exchanged programs. One says, "You do what we used to do, and we will do what you used to do." And both of them reported considerable improvement, thanks to the change!

Paying Attention to Change

Well, we say change is stimulating in itself; it does not matter much what the change is, just keep the faculty moving and excited. That may be the case--partially. But something else happens when change is introduced that helps explain why almost anything seems to work better somehow. It is this--when we change something, we watch it, we pay attention to it. We may drop in and observe it more often. Additional tests may be given. Visitors may come to see it. The person teaching the program may be put on the platform to describe it to other professionals or to the public. He may be allowed to visit other schools to see how they are doing. Classroom teachers normally work in such isolation that that kind of outside attention can scarcely fail to have an exhilarating effect. It is very likely that you can improve school teaching just by paying attention to it! The logic that accompanies the change, "When we change it, then we watch it!" has a very strong positive effect.

ORGANIZATIONS OUTSIDE THE PUBLIC SCHOOL THAT DEAL WITH CHANGE

State Education Departments

Now consider with me state education departments. Generally, state departments have a powerful influence on change. Some of it is positive and some of it is negative. The schools feel a lot more comfortable in making change if the state department has endorsed it. It may be that state endorsement of the change is as important as state financing in the eyes of local people. Also, the local school people say very frequently:

> Now we can hear the voices from the top, the Commissioner or the Associate Commissioner, calling for major shifts. But it is not fair to us that that spirit has not yet permeated that whole Department. The people we deal with are often lower in the hierarchy, and we are not sure that they got the message from above.

Field supervisors who visit the schools are the department to the local administrator who does not see anyone else. All he knows about the department is what the supervisor says. People in the schools believe that approval for innovations increases as you go up the hierarchy in the state department of education. If you begin at the bottom and go up high enough, you tend to find that those at the very top will say "yes" to almost anything.

Several forces apparently at work in a big organization make saying "Yes, go ahead and do it," a privilege reserved for the men at the very top of the organization. How to get lower eschelon people in a bureaucratic organization author-

ized to say, "yes, go ahead and try it out," is a serious problem that cannot be ignored in most state departments. It is not enough to say "yes" from the top; the call has to come from the bottom of the organization.

It is often testified that a lack of coordination within the department makes it very hard to get a straight answer. One at the local level seems to be hearing "yes" over here, but he is getting a "no" from across the hall from another division. "Yes" on program, "no" on facilities! "Yes" on facilities, "no" on money! For many local administrators it makes the department look complex and difficult to deal with.

It is also largely testified that the department tends to be encouraging if you want to adopt a program it officially endorses. If you want to do something it has not officially endorsed, the department's reaction tends to be, "Well, we aren't saying you can't do that, but we would be just as happy if you didn't." Most schools find that a little depressing--a kind of a wet blanket!

There are two kinds of schools which do not seem to be inhibited by the state's attitude that they perceive. One kind is the slow moving districts, slow changing, often of low socio-economic status, somewhat backward. It is not inhibited by the state department. It does not even get out as far as its own boundaries, so it never feels them pressing inward. The other kind is the fast-moving, alert school

districts that say they have learned how to deal with the state department and are not inhibited by it. They have a secret. The secret is--Don't answer! That tends to isolate the department from some of the most innovative ideas in the field.

Most state departments have inadequate mechanisms for approving experimentation with approaches that they do not already officially endorse. That is an extremely important criticism. There is no way to say "yes," except to what has already been adopted as official state policy. The department spends much of its time in regulatory activities. Many personnel have a habitual concern with enforcing minimum standards. They are concerned with getting cracks out of the floor, not lifting the ceiling.

Fortunately, it has been changing, but state departments are still characterized by provincial outlooks. The department often adopts some viewpoint because the schools ask so often--"What can we do? What is permitted? What do you allow?" And the department scratches its head and thinks up an answer--in order to give direction. It takes positions and develops the procedures that keep local schools asking: What is official? What is permitted?

It is extremely difficult for any organization to recommend or to insist on certain arrangements, and at the same time to seriously encourage experimentation. It is hard for one organization to do both. Most departments do not have a way to handle this. As I hear it from the state office,

the message is mixed and comes out something like, "Say, how would you like to do this thing I'm telling you to do?" We need some social inventions on how the department can on the one hand say, "That's the way we want it done," and on the other hand say, and mean it, "But try something different!"

Most departments are too small for direct supervision of local school programs. There is a lot of pretending that goes on. However, vocational education is better than most other fields. Generally speaking, you have enough human beings out there, particularly in fields like vocational agriculture, to be on the site often enough to know something about the total program and be helpful. In many other fields, some in vocational education, there are too few field supervisors who have the idea that they can get out there to give training, give help, give consultation. We are fooling ourselves frequently in expecting direct supervision and direct service.

Finally, state leadership is wanted. It is sought. Most local school districts continue to call for state leadership from a strong desire to get direction, or at least state help.

Colleges and Universities

Now let us consider the colleges and the universities that some of you represent. Except for training teachers, which everybody regards as critically important, the colleges and universities have very limited reputations for innovation in elementary and secondary school programs. They are not connected with the process of change, so elementary and secondary schools act for themselves. Universities are not organized to exert direct influence on the programs, and they

do not think it is their job.

The university is organized to teach regular courses of predetermined content and length to individuals who elect to come to the campus or come to regional training centers. Faculty time at the university is allocated to teaching these pre-set, pre-fixed courses. Even if the time is available, and for many professors it is not, neither the local schools nor the university seriously expects a real relationship to be set up between local teachers and the professors. Neither party expects it and it does not happen. Very few of the local programs that I have ever visited were suggested, planned, evaluated, or even actively visited by university personnel, on either a paid or voluntary basis.

Moreover, the university deals with the individual teacher who chooses to enroll in a course, for whatever motives. That is not the way to approach a local school if you want to make a change. Dealing with teachers one by one over a period of months or years is not usually a sufficient technique for intervening in the local program. Once again, that is what the college knows how to do, that is its business. It sells training to individuals who elect to enroll in the courses. That is weak! That may be sufficient to explain why the university is not connected to the process of local innovation. All teachers have to be reached at about the same time in the same way.

The professors often say they do not intend to equip the young teacher with specific instructional techniques

anyway. "We don't teach him how to teach," they say.

Then I ask, "What do you teach him?"

The answer often comes back, "We teach wisdom. We give him a general body of principles on which he can build techniques."

"Where does he learn the particular techniques?

"Well, he'll learn those in the school which employs him."

This may not be as true in vocational education as elsewhere, but the college detachment--first, lack of knowledge of new programs, and secondly, reluctance to teach specific techniques, leaves a gap. The local school is not set up to teach the techniques. State personnel do not teach the techniques either, and the teacher simply has no place to learn them. He is expected to invent them for himself. Remember, the key to successful innovation is help to the teachers. But, most of the time, not much assistance is given.

Innovations usually fail, not because of resistance, but because of inability. Not knowing how to do it is more influential than unwillingness. Nobody in the profession understands the necessity for inservice training like the people giving pre-service training. Professors know how little gets done in the pre-service years. But the schools act like they are buying a finished product. If the teacher gets reeducated it is because he signed up for a course on his own initiative. The colleges send out unfinished products. They know it, and we treat them like we do not believe it. We make few retraining arrangements--just a little salary incentive to take a few courses is the main strategy.

DEVELOPMENT--EVALUATION--DEMONSTRATION

The main conclusion that I have reached over a long period of time in studying educational innovation is that there are distinctions in the work to be done that we do not recognize. But we are getting better at it. In the past couple of decades some of these things have become clearer. These are things that we do not believe as a profession and we prove it. There is a difference between developing a new program, evaluating it, and demonstrating it for the purpose of spreading it.

Development, evaluation, demonstration--they are different. When you get properly set up to do one of them you have probably killed your chances to do the other two. The people who are good at one frequently are not good at the others. They are just not good at everything. But, we do not believe it.

Development

If you want to develop a distinctive new program, call it career guidance, career development, career education, whatever, or a single course in the vocational field, you need certain conditions in the setting. I will give you more details about this in a moment, but briefly what you need is bright people, a limited problem, time to work on it, lavish resources, promise that somebody is going to use it, and some chance for personal recognition. Freedom, artificially, lavish resources, lots of time, and lots of brains are what it takes to generate any distinctive innovation. The artifi-

cial resources and freedom required to carry out development eliminate the chance to do evaluation or demonstration at the same time.

Evaluation

You do not want freedom, you want control in order to evaluate. You want to hold steady enough to know what it is that caused the outcomes. The freedom that innovation demands to make a great invention, that flexibility in movement, kills your chances to get an evaluation. If the program is held steady, then you can assess it. But, holding something steady would handcuff the inventors.

Demonstration

This is another game. The setting for a demonstration should be plain and ordinary. It should be just another school, like mine or yours. Because if you see it working there you can believe it could be transplanted back to your school so that a visitor does not come in and say, "Oh, sure, if I had $50,000 and all these exemplary programs, I could probably do that myself. But I don't have the extra money, so I can't." Then he goes home and forgets it.

The freedom required for development, the steadiness required for evaluation, the plain, normal conditions required for a persuasive demonstration are in conflict with each other. And the people who can do one of these well often do the others poorly. But we do not believe that. It is believed in agriculture, medicine, and in certain other advanced professions, but not in ours. 28

For example, take the campus schools. The elementary or secondary campus school, university connected, has been and still is expected to develop new programs. We expect that, sure! We evaluate them, naturally we check them out! We demonstrate, sure! There is supposed to be a place where you can go to see these things being done simultaneously. It should also show the best current wisdom to teachers in training and be a safe place for the professors' kids to go to school. But, you cannot get all those things in one setting.

One of the most serious barriers to a special approach is our failure to recognize it. I do not have to tell you that the typical operating school does not have a setting rich enough, free enough, and the people are not "right" enough to generate a distinctive new program. You will not get development in an ordinary, unenriched school setting. You will not get the systematic testing of a program if you do not arrange for it. Local schools are not interested in evaluating the effectiveness of programs. They are interested in adopting the best that is now known, not proving what makes it good. That is not their game.

DEVELOPING A NEW PROGRAM

The conditions for development are so different that we have to do a special setup. Inventing its own program is a great deal to ask of any local school. Very few are rich enough in resources or free enough in atmosphere to provide the necessary hothouse conditions. However, a school

which seriously intends to develop its own innovation must deliberately create a special invention setting, the ingredients of which appear to be these:

1) A group of highly intelligent people with differentiated roles

It seems clear that shared goals, cross-pollination of ideas, mutual support during failure, reinforced exhilaration during success, the convenience of a sympathetic but critical hearing from fellow workers, and the creation of a cadre devoted to the spread of the ultimate invention are more than sufficient reasons to create a group rather than to rely on individuals working separately.

Intelligence, energy, and orientation to forces and trends outside the locality, as well as competence in the opinion of the school staff, are attributes of the inventors which tend to assure quality in the innovation and eventual acceptance of it in the local school. A temporary group composed of people who do not normally work together as a project team breaks any fixed circle of expectations and frees ideas and talent to emerge more easily.

2) A limited problem

Unless the problem area is narrowed so that a definite problem emerges which the group can solve with the time, talent, and funds available to it, success is not likely.

3) Available time

Considerable working time must be allowed if a true innovation is sought. So little working time is allotted to most school groups attempting to innovate that they usually resort to adopting what already exists, making occasional modifications if time allows.

4) A special place in which to work

The choice of a work setting somehow separated from the familiar working environment enhances the sense of specialness which a successful working party always seems to develop.

5) An expected product

Without in any way predetermining the nature of the

final program to be produced, it should be clearly established that the working party is expected to come up with a definite body of school practice. A clear expectation of a usable product serves to increase task orientation and add a certain sense of urgency.

6) Knowledge parallel efforts

It is desirable although not essential for the innovation team to know how others are attacking similar problems. Duplication of errors can be avoided and duplication of correct steps made deliberate. Because parallel efforts are usually not detailed in the literature, travel to other sites is the best way to get full information.

7) Freedom to design almost any promising approach

Any kind of restriction in an invention setting lessens the chance of getting a truly distinctive answer. Members of the working party inevitably come with an elaborate set of assumptions about what the school would accept and use well. These assumptions grow out of ideas about the competency of the staff, their attitudes toward change, the types of materials and equipment they would be willing to use, the time blocks and spaces in which they work, the maximum acceptable cost of the resulting program, and so on.

It is probably best for the working party not to be guided by such assumptions--at least in the exploratory stages--because it is always conceivable that a new program of superb character would be accepted even if quite different from the one currently in use. Moreover, as the work advances, accurate knowledge of conditions in the school can be gathered and those elements of the new design which might block its acceptance can be replaced by less expensive, more usable components.

8) Try-out situations

The designers must be offered locations in which the innovation can be tried repeatedly, redesigned if necessary, and tried again as part of its actual invention. The testing will often involve tiny components, use rough pilot models rather than finished products, require short periods of instruction, involve less than fullsize classroom groups, use working party members as teachers, and be accompanied

by immediate evaluation. It should be obvious that immediate access to classrooms is highly desirable.

9) The liklihood that the innovation will be used

Most members of the invention team need to feel that if they design a useful program, their colleagues will use it. Thus they should be told at the beginning that the entire school can benefit from what the working party designs.

10) The prospect of personal recognition if the innovation is successful

Among the ways of enhancing the expectation of recognition is to tell the invention group that they can present the final program to colleagues in the local school system and can also describe the results at professional meetings and in professional journals if they wish.

ADOPTING A NEW PROGRAM

Adopting a new program which has already been developed elsewhere requires considerably less effort than inventing one, but successful adoption does require that the local school be able to meet certain minimum conditions. These appear to be as follows:

1) An identifiable innovation

The new program must be in a form which is identifiable, describable, and reproducible. It must be adopted as a body of practice. There may be profound principles or a great guiding spirit behind it, but unless it is reduced to behaviors which the adopter can learn, it cannot be successfully imported.

2) Public acceptance

Opposition must be prevented even if enthusiasm is not aroused. The public must be informed about the change so that it will not come as a surprise and arouse opposition for that reason alone. The customary channels of information such as newspaper reports, letters from the school, and PTA meetings

can probably carry the limited information needed to prevent opposition.

3) Strong administrative endorsement

If any principle is well-established, it is that a positive desire for the change--not merely a neutral acceptance--must be displayed by the administrative staff. The ideal stance for the administrative staff is not simply that the change must be accomplished, but that all the resources at its command will be applied diligently to easing the way for the change.

Local personnel, who presumably will hear about the new program long before their principals and superintendents, can often arouse administrative interest in it. They should be encouraged to do so. Whether or not this method works, those in charge of disseminating the program must remember that the administrator is ultimately the key member of their audience, especially because the innovation demands new behavior from many teachers.

4) Balanced attention to the novel and to the familiar

Probably the most delicate balance to be struck in the introduction of an innovation is that between pointing out its familiar elements and pointing out its distinctive ones. Familiarity with the ingredients of a new program paves the way for acceptance by assuring the staff that they can handle the innovation partly with existing skills. And yet if it is made to seem almost identical to what they are already using, there is no reason for them to change. Or if they do change, they may adopt only the familiar elements and ignore the very ones which make the innovation superior.

5) Convergence of outside reference group norms

Staff members belong to professional associations outside the local school system and to other outside groups which can grant them status and prestige. In addition, they look for approval to outside agencies which are in a position to judge their work, such as the schools which will receive their students subsequently or the employers who will hire them. Many staff members respond strongly to the values of such outside groups and agencies--especially the more innovative staff members, who tend to be externally-oriented. If the innovation calls for behavior which the staff member thinks unacceptable to the

outside group, he will resist the innovation.

6) Early staff awareness and interest

Diffusion studies in other fields suggest that practitioners go through a series of steps in adopting a new program. In a typical series, they become aware of it, they develop an interest in it, they decide to try it, they use it on a limited scale, and they adopt it for full-scale use. While it is unlikely that these steps are followed by every school adopting every program, we can recognize from our own experience the difference between being aware that something exists, deciding to give it a try, and making it permanent.

The school presumably needs different information as it goes through each step. Simple awareness of the innovation can be established by printed material and by speeches at meetings. To convert awareness into actual interest, a kind of "artificial visit" is desirable. Longer printed or filmed descriptions can be used for the "visit."

7) The decision to try the innovation

Once the practitioner knows what the innovation is, he has arrived at the point where he can consider whether to use it. The two chief questions in his mind at the stage are likely to be: "Is it designed for a setting like my own?" and "Can I make it work?"

It seems likely that the best way to answer such questions is to have prospective adopters visit a site where the innovation is in actual use. Certain conditions are necessary if the visit is to be fully effective:

a) There must be a minimum of artificiality and showmanship in the program being demonstrated.

b) Ideally the demonstration setting should be recognizable to the visitors as quite similar to the schools from which they come.

c) There should be no special features of the program which the visitors will regard as essential to success but as unreproducible at home. The presence of outside funding, unusually capable specialists, extraordinary teachers, abnormally high contact with university personnel and other expensive or unmanageable features will tend to

convince visitors that the program is not for them.

d) It should be possible for visitors to talk to teachers and students as well as to sponsors of the program so that they can get the perceptions of those who must live with the program from day to day.

8) Prohibitive regulations removed

Regulations which might prevent adoption of a unified program, such as those governing certification, must be mended, suspended, or otherwise set aside.

In addition to the actual regulations, a subtle process is at work which can be more troublesome than the regulations themselves: a barrier is often perceived by the viewer even though it was not intended by the governing agency. The reading of non-existent prohibitions into regulations comes in part from misunderstanding and probably in part from a search for reasons to maintain the status quo. Whatever the reason, it is common for the practitioner to say that he is prevented by someone else's rules from adopting new behavior, even though further inquiry shows that the "someone else" has no such rules.

9) Physical facilities modified

Some innovations require more space; some require new subdivisions of old space; some require more flexible allocations of space from day to day. Prospective users need to know the spatial requirements of a new program.

10) Time schedules amended

Best use of a program may require more operating time, or a shift in time placement, or more flexible time scheduling. Crowded curricula and busy days in most schools mean that the time demanded by any innovation will be examined critically by almost every prospective user. High schools are a special case. Time shortages or unusual burdens upon the already-complex schedules which govern life in the high schools are sufficient reasons to reject an innovation which may be acceptable on all other grounds.

You will need to explain any special time demands made by the new program.

11) Materials and equipment provided

It is clear that some programs envisioned may require more equipment and materials than teachers are accustomed to using. This may be a desirable feature and it should be appreciated by almost every teacher. However, it would be helpful to explain whether a unified equipment and materials center can be adopted as a concept. Perhaps you will advise schools to adopt the unified center as an idea and then add equipment and materials as rapidly as possible.

12) Initial staff training

Of all the steps in adopting an innovation, the most consequential one is training the staff to conduct it. This is the key to success--an inescapable requirement of authentic adoption.

It seems quite clear that guided practice over time is the only way to convert an appealing idea into a living body of skills. In the best circumstances, the teacher of teachers knows more about the innovation than those he is re-educating and has himself succeeded in using the program with students. Staff members learning the new approach should use it with students over a period of weeks or months and meet periodically with colleagues and outside experts to discuss their experiences. Help should always be on call.

All members of the faculty should probably be trained at the same time. Otherwise polarization of opinion around user and non-user groups may occur and inhibit diffusion.

All the equipment and materials the staff will need should be on hand during their training.

13) Continuing staff training

Turnover in school faculties is so high that in-service training must be available continuously. Otherwise the innovation can drift out of the schools along with staff members who leave. Moreover, periodic refresher work is good for those who remain.

CONCLUSION

What is required in the Georgia public schools or any other setting as the place to develop, or to adopt? Those are very different questions. Once we get those distinctions clear in our minds, it helps us to know that we are trying to develop a new program, or evaluate it, or demonstrate it for the purpose of spreading it.

Now for one final point and this is a repeat. The administrator is in a difficult position. He cannot get out of it. He has the power and there is no way to get rid of it. He cannot leave educational change to the faculty or other staff. They cannot do it alone. The administrator has to participate actively and positively or he does not get change.

If you are not getting very rapid changes in the face of what I think is public willingness and teacher willingness, you might think of Albert, the alligator, who had been sent on an expedition to locate the enemy. He reported to the public after returning from a trip through the swamp (Okefenokee perhaps!). Albert came back, stood by the cypress, saluted Pogo, and said, "I have found the enemy, and he is us."

WHY EDUCATIONAL INNOVATIONS FAIL AND HOW THEY CAN BE MORE EFFECTIVELY IMPLEMENTED

by

Neal Gross*

In introducing me, Earl Russell noted that I serve as a consultant to The Open University in England. I have discovered while working in England that many English educators are very much concerned about the difficulties they are encountering with open schools and open classrooms. They, too, are vexed and perplexed by the problem of carrying out educational change. How can change be facilitated? What needs to be done to implement innovations? English educators, I assure you, are as vitally concerned with these issues as you are.

What accounts for the fact that we have secured so little payoff from our efforts to introduce educational innovations into American schools? What can administrators do to serve as more effective implementers of educational change? These are the issues I propose to consider with you today. In my judgment they deserve to be given the highest priority in any discussion of critical educational problems in the United States today.

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*Dr. Gross is Dean, Graduate School of Education, the University of Pennsylvania, 3700 Walnut Street, Philadelphia, Pennsylvania, 19104.

I want to stress at the outset that I do not feel I possess a set of final answers to these problems. I do not believe they exist. I plan to offer you a set of sensitizing tools and concepts that I hope you will find useful. My role in your Conference is to provide you with new ways of thinking about the problem of educational change and to offer you intellectual tools that will be of practical use in implementing innovations. You, however, may have to modify these ideas somewhat as you attempt to apply them in the field. That is one reason why you are administrators. Hopefully, I can be of service in helping you perform your important functions more effectively.

More specifically, what I propose to do is as follows. First, I shall look briefly at the payoff we have achieved from large-scale efforts at educational change and then consider the most frequently given reasons for our failure. Second, I will present my own views about this matter. Third, I will propose a series of ideas about implementing innovations that I hope you will find of value. They are based on my own analysis of the problem and the findings of a research investigation my colleagues and I recently completed.

As educational administrators, what models do you employ when you embark on a change effort? What strategies guide your performance when you attempt to carry out new programs in career or vocational education? How do you conceptualize the problem? Do you have some "game-plan" in mind? Very few educational administrators appear to employ models or strategies in introducing and implementing innovations. Many of them spend a

great deal of time obtaining money to introduce educational change and, if they are successful in their funding efforts, they introduce innovations with little prior planning. But if they do not work, administrators typically say, "It's the teachers; they're resistant to change. They are the ones to blame." I submit that this is not a very productive or realistic way of conceptualizing the problem of change in schools. But I repeat: What model do you employ? How do you conceptualize the change process when you introduce and implement an innovation?

THE FAILURE OF EDUCATION INNOVATIONS

Huge resourses, largely federal dollars, have been spent on the introduction of compensatory educational programs into schools during the past decade. A review of over 300 studies of these programs showed that they have had little or no impact on educational achievement (Gordon and Wilkerson, 1966). The U.S. Commission on Civil Rights (1967) came to similar conclusions. James Kelly (1969), now of the Ford Foundation, undertook a national examination of major new programs introduced into our cities when he was affiliated with the Urban Coalition. He concluded that few of the innovations were succeeding and "that the students knew it, the teachers knew it, the consultants knew it, and the researchers knew it."

Harold Howe, just before he resigned as U.S. Commissioner of Education, bluntly noted, "There just hasn't been much payoff from our efforts; we need to think hard about what's wrong

before we put more and more money into new programs and other innovations" (Rockefeller Foundation, 1968, p. 127). And officials in the U. S. Office of Education today are acutely aware of the failure of their previous programs. That is why the Office proposes to establish new programs such as renewal sites and teaching centers. In the Philadelphia School District and other school districts in which I have worked, the same sense of frustration prevails. A great deal of money and effort has been poured into educational innovations such as career education, vocational education, new reading programs, and all kinds of curriculum reform. But there has been little or no payoff!

When I have looked through the literature that bemoans our failures or have talked to chief school administrators about them, I have found that our failures are attributed to the following kinds of circumstances. The first is, in the words of one school superintendent, "We don't have enough money. That's the problem. We are given money but not enough to do the job." The U. S. Office of Education has serious reservations about this argument. When it has invested a great deal of money into a single district, the Office has not found that academic or other types of performance of students materially improved. Of course, there may be situations in which greater inputs of money would be beneficial. However, I have grave reservations about the assumption that more money alone will solve the problem.

A second circumstance is that projects are of too short

duration. I think there is much justification for this argument. Most of you know the amount of time that it takes to work up a proposal, to get a project started, and to keep it in motion. Then it must be evaluated. The agencies in Washington, D. C. frequently insist on evaluation before there is anything to evaluate! And then in the middle of the first year of the project you have to begin to prepare the proposal for the second year. This indeed is a very valid criticism.

A third circumstance that is frequently mentioned is that teachers and other school personnel are resistant to change. A fourth is that they lack the qualifications to carry out educational innovations. I think that there are more fundamental reasons than the four I have mentioned for the failures of most educational innovations. I now present my own analysis of the matter.

NEW PERSPECTIVES ON THE FAILURE OF EDUCATIONAL INNOVATIONS

My basic thesis is that we have been using extremely simplistic approaches or models to deal with educational problems that are inherently complex and that this condition is at the root of our failure to improve the education of our children. I submit that we need a more realistic approach if we are to bring about significant changes in schools.

The Web Phenomenon

Now let's get specific. Consider the dropout problem, a problem of special concern to you. What have we done in our efforts to be of service to these students? To improve their motivation? To improve their level of aspiration? We have

introduced innumerable innovations into the schools, but we know that few have been successful. Each one has been introduced on the assumption that the innovation was going to ameliorate the problem in some important respect. Why have they had such little impact? I submit that the answer is that these educational innovations typically ignore complex social forces that are influencing the student and the realities of the milieu in which they live.

Why do drop-outs drop out of school? Why were they not "properly" motivated? Why do they have negative self-concepts? What influences are at the roots of their difficulties? I contend that they are typically caught in a powerful web of negative social forces that results in their perceiving the school as a hostile or threatening institution. One source of these forces is the family. They can learn at home that schooling is valuable or that it is not especially worthwhile. The family can instill in children a respect or disrespect for education. Similarly, peer groups in which students are involved exert powerful influences on them. The attitudes of teachers, guidance counselors, and principals toward students also make a great difference in their reactions to school. If students perceive that adults in schools are really interested in them, they respond differently than if they perceive lack of concern or hostility. The way the police relate to teenagers, the manner in which social workers relate to families, the type of role models to which they are exposed--each of these circumstances is involved in "the web." I contend that

the type of experiences to which drop-outs have been exposed in their social relationships have been generally harmful to their development and that they tend to reinforce each other. They have become enmeshed in a web of negative forces.

Nearly all of the educational innovations we have introduced to deal with the drop-out problem have ignored this web of negative social forces and have dealt with only one of its facets. Is it any wonder that they have failed? Complex models, not simple ones, are required to deal with complex problems. What is required in my judgment are innovations which simultaneously focus on the several social institutions that influence students. We need to use saturation techniques. We must break the bonds of that web if we are really going to help potential drop-outs. To assume that the introduction of a new wrinkle in the guidance program or career education program will do the trick is to adopt a simplistic approach to a complex problem.

Projects! Projects! Projects! Nearly all that I have examined ignore the need for cumulative impact. They may meet the needs of universities and state departments of education but they do not meet the needs of students. They are not based on a fundamental grasp of the problem. This then is one basic reason in my judgment for the abysmal failure of most innovations we have introduced into the schools.

The Truncated View of the Change Process

A second basic reason for our poor record in educational change is that we have been using a truncated version of the educational change process.

The National Center for Educational Communications is concerned with the task of introducing promising educational innovations into schools and classrooms throughout the country. What model does it employ? The R D and D model: identify research that suggests important new educational ideas, then develop them, and finally diffuse them. The job is then completed. But the fact of the matter is that the really difficult part of the change process is ahead of us when an innovation is diffused. There are few things more complicated than taking a new educational idea and getting it implemented in an organization. This involves complex social-psychological matters for it involves attitudes and values, cliques, power structures, long-standing arrangements, and teacher associations and unions. It is not simple at all. It is extremely complex. What I am saying is this: it is one thing to get an innovation introduced into a school. It is another thing to get that innovation carried out effectively.

I contend that ninety percent of the evaluative research in education on innovation is meaningless. Why? The procedure that is typically followed is to use the experimental approach: the innovation is introduced into an experimental group while a control group uses the "regular program." Then, on the basis of "before and after" measurements on one or more criterion variables, a conclusion is drawn about the effects of the innovation. If significantly greater gains are experienced by the experimental as compared to the control group, the innovation is viewed as a success. If not, the innovation is viewed as a failure.

But to my knowledge no one ever asks the question: Did the treatment in fact "take"? If the innovation was not in fact implemented, what is the point of attempting to measure its effects? I suspect that many good educational ideas have gone down the drain because we have made judgments about them in ignorance of whether they were ever effectively implemented.

I now want to tell you about a study my colleagues and I conducted in a school that proposed to carry out a major educational innovation (Gross et al., 1971). Many people believe that one reason educational innovations do not work is because teachers and administrators are resistant to change. We searched for and found a school in which no one could say that the staff was resistant to change. Virtually everyone in the school favored change. That is why we picked the school for intensive study. We entered the school before the innovation was introduced and we then observed it for nearly eight months. It was an elementary school whose pupils came from families of low socio-economic status. It was located in the poorest section of a large city on the East coast.

The innovation was the open classroom concept in which the teacher serves as a catalyst for, rather than as a director of, learning. Four months after the innovation was introduced the teachers' attitude toward the innovation was "To hell with it!" They were not implementing it at all. They wanted nothing to do with it. What accounted for their failure to implement it?

We found that one of the major reasons was the most teach-

ers had no clear idea of what the innovation was really all about. No administrator recognized this problem and set up arrangements so that teachers could talk freely and frankly about this serious difficulty. When they first tried to implement the innovation the teachers were confused; they were still confused several months later.

A second reason was that the staff did not possess the skills required to carry the innovation out. They had been asked to do things they were unable to do. In the traditional classroom the teacher sits in front of the classroom and "manages" the children. The teacher is "in charge." But in the open classroom children are given a great deal of freedom to do as they wish and the "usual" constraints are lifted. Teachers did not know how to relate to the children and they lacked the skills to serve as catalysts to their learning. They also did not know how to cope with discipline problems that arose in this new environment. The teachers badly needed new skills but they did not receive them. As could be anticipated they reverted to their earlier behavior patterns relatively quickly.

A third reason was that hardly any of the books, materials, and other equipment they required, and that were promised, were made available to them. The administrators expected teachers to develop new materials. The teachers felt this expectation was unrealistic and inappropriate.

A fourth reason was that no one recognized that other aspects of school arrangements would have to be changed (e.g.,

grading practices) if the innovation were to succeed.

Our findings revealed that the school administrators constituted the major obstacle to the implementation of the innovation. It is important to note that they were strongly in favor of change and that they were initially very excited about the innovation. But they did not help or facilitate the teachers who were expected to carry it out. The administrators wanted change, but their behavior precluded its occurrence. I believe this circumstance can be accounted for by the fact that they had no clear way of thinking about the problem of implementing innovations.

I now want to propose a way of conceptualizing this critical phase of the change process. When a major innovation is introduced into an organization, an obstacle course arises. This obstacle course consists of barriers that will have to be overcome if the innovation is to be successfully implemented. Some obstacles probably occur in nearly all efforts to implement innovations, for example, lack of clarity about the innovation, lack of skills on the part of the individuals who are expected to carry it out, lack of essential materials and equipment, and existing organizational conditions that serve to inhibit the implementation of the innovation. Other barriers are probably "organization-specific," i.e., they are unique to specific organizations, and they, too, must be taken into account.

The point that deserves special emphasis is that the administrators of schools and school systems play a central

and critical role in the success or failure of the implementation process. They can or cannot engage in the planning that will identify the key elements in the obstacle course and they can or cannot take the steps needed to overcome these barriers. It is their responsibility to establish feedback mechanisms and a systematic monitoring process. They must be prepared to take the actions required to remove inhibiting circumstances. They are the only individuals who typically have the power to remove the obstacles. In short, the implementation phase of the change process, like other phases, requires the exercise of administrative leadership if it is to succeed. Few educational administrators appear to recognize how critical they are in the implementation of innovations in their schools.

Some Additional Observations

There are other aspects to the problem of implementing innovations that I wish to stress. Many efforts to institute changes in schools ignore the critical phenomenon of trust. I think it is a variable that is crucial in teacher-administrator relationships. People who trust each other feel free to interact and speak frankly about their problems.

Not long ago I encountered an interesting situation in New York City. I had contacted one of my former students, a brilliant school administrator, about an innovation I wanted to try out in schools under his jurisdiction. He said

> I'll try it out; but I need to explain to you what you will be getting yourself into. We have tried out 99 innovations in the past year and they have all failed. Yours will be the 100th. I want you to understand the context in

> which you will be operating: the teachers no longer have any faith in their administrators and their new proposals. Their confidence in us must be restored before they will take proposed educational changes seriously.

Still another crucial factor in the successful implementation of an innovation is the involvement, at an early stage in the change process, of those who are going to carry it out.

Another point that deserves emphasis is that we always talk about adoption but do not talk enough about adaptation. A new educational idea that is introduced from the state level may or may not need modification in particular schools if it is to have positive educational effects. The question is how best to obtain the desired educational outcomes from the new idea. One school may have a group of very capable teachers, but in another, the teachers may be less able. The innovation may have to be modified in view of the difference in the two schools. We should, therefore, encourage administrators to modify innovations in view of the circumstances to be found in their schools. Much more consideration needs to be given to the need for the adaptation of innovations to the conditions that exist in particular schools.

IMPLICATIONS

I believe that my remarks today have the following implications for you in carrying out your important educational tasks. First, you need to recognize that you play a critical role in the educational change process. Second, you need to possess a model of practical value to help you conceptualize

and facilitate the implementation of innovations. I have suggested such a model during my presentation. Third, you need to recognize that you will need to develop complex and multifaceted approaches to deal with educational problems that are inherently complex. Single dimension projects can be expected to have little impact. Fourth, unless you can establish trust in your relations with your staff, there is little likelihood that you will obtain effective cooperation from teachers in your effort to institute any fundamental educational change in your schools. Fifth, you need to take into account the unique aspects of your situation when you plan to introduce an innovation into your organization. Modifications in it may be needed if the innovation is to succeed. Sixth, the more you involve those who will have to implement an innovation in decisions about it, the greater the probability they will exert the effort required if it is to succeed.

I wish you well in carrying out the challenging and difficult task of introducing and implementing sorely needed innovations into our schools. I hope my remarks today have been of some value in shedding light on issues that I know vex and perplex many educational administrators as they attempt to cope with the problem of educational change.

STRATEGIES FOR CHANGE IN VOCATIONAL EDUCATION IN GEORGIA

by

Earl B. Russell*

Educational change generally does not occur overnight. Despite our wishes that it would occur this way, change still takes a lot of effort.

The potential in Georgia for having a climate for change, for really making dramatic improvement, for showing results not only in this State but to people outside the State, is tremendous. It comes from the commitment you have to pursue the ideal in spite of problems seated in constraints and barriers. Many of our barriers were inherited, and they seem particularly difficult to overcome. However, we must at least attempt to make meaningful progress in a continuous and deliberate way.

I hope to communicate with you some of my thinking, which has been enriched today by our consultants. What I will say will be one person's recommendations to you, a body of practical-minded vocational education administrators, regarding possible areas for us to exert energy to bring about needed changes.

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*At the time of this address, Dr. Russell was Assistant Professor and Research and Dissemination Specialist in the Division of Vocational Education, College of Education, University of Georgia. He is now Research Specialist, Instructional Systems Design Program, The Center for Vocational and Technical Education, The Ohio State University, 1960 Kenny Road, Columbus, Ohio 43210.

My statements are the product of long-term work, and I want your reactions to them.

Generally, what I will do is to present two major ideas, not unrelated to one another. The printed program you have indicates these as being two strategies for change: first, the idea of change orientation of vocational teachers; and secondly, selective dissemination of information. I will try to describe these strategies in a somewhat logical fashion. There is a connection between them. These obviously should not be considered the only alternatives available to us to bring about change. We could discuss a limitless number of strategies for change, but these two represent areas for concentration today.

STRATEGY I-CHANGE ORIENTATION OF VOCATIONAL TEACHERS

This strategy emerged from a project which I received funding for while employed at The Center for Vocational and Technical Education at Ohio State University. The project, entitled "Measurement of the Change Orientation of Vocational Teachers," is described in detail in a report published by The Center (Russell, 1972).

The general idea for this project grew from my observations as a vocational teacher in Illinois. This was a time when I considered myself to be part of a group of teachers in the state who were attempting some new approaches within our vocational education program. It seemed rather clear at meetings with my colleagues that there was a predictable group of

teachers who would be in favor of innovative programs and a predictable group of teachers who would be opposed to new programs and approaches.

Why is Change Orientation Important?

Change orientation generally refers, in this context, to attitudes toward change held by vocational teachers. Attitudes can be meaningfully defined for you, the practitioner. Let me refer to a long-standing and very popular definition of attitude put forth by Allport (1935). He defined attitude as, "a mental and neural state of readiness to respond, organized through experience, exerting a directive or dynamic influence on behavior." In simpler language, Allport was saying that attitudes are an important part of one's nervous system, that they are obtained directly through day to day experiences, and that they have a definite influence on individual behavior.

The general rationale, which my colleagues and I at Ohio State University believed to be of considerable importance in implementing innovations in vocational education, was that a knowledge of (1) those vocational teachers who are in favor of change and (2) a knowledge of those teachers who oppose change would be particularly valuable to state-level administrators of vocational education, as well as other leaders, in determining where energies and other resources should be spent among teachers in bringing about program improvements. Used properly, such information could help make innovative efforts in vocational education much more effective and efficient than they are now.

Let us consider for a moment the importance of attitudes. Attitudes represent our feelings about a wide range of situations, objects, or circumstances in our everyday lives. For example,

most of us have attitudes toward members of the opposite sex, public officials, school bond issues, certain makes of automobiles, and so on. It is also generally known that attitudes have a way of influencing our behavior, provided that real or perceived barriers are not overpowering in our environment. For example, teachers have widely different attitudes regarding the discipline of students. One teacher may respond to a student who is a discipline problem by sitting down for a conference on a one-to-one basis, whereas a different teacher may apply corporal punishment to the same student for displaying the same kind of behavior.

The question arises then regarding attitudes toward change, or "change orientation," of vocational teachers. Can we predict favorable attitudes toward change among vocational teachers? The answer is: Yes we can! Attitudes are measured by using some type of an attitude survey, and usually such a survey is called an attitude scale. You are all familiar with the Gallup Poll, a type of attitude survey. The project that I conducted at Ohio State University was to develop an instrument (or scale) to measure the change orientation of vocational teachers.

Now consider for a moment a generalized distribution of "adopter categories" described by Everett M. Rogers in his 1962 book, Diffusion of Innovations (see Figure 1). Adopter categories are based upon the time required for individuals to adopt a given innovation. These categories may be applied to any population of persons, whether it be all carpenters in Atlanta, all vocational teachers in Georgia, all high school students in

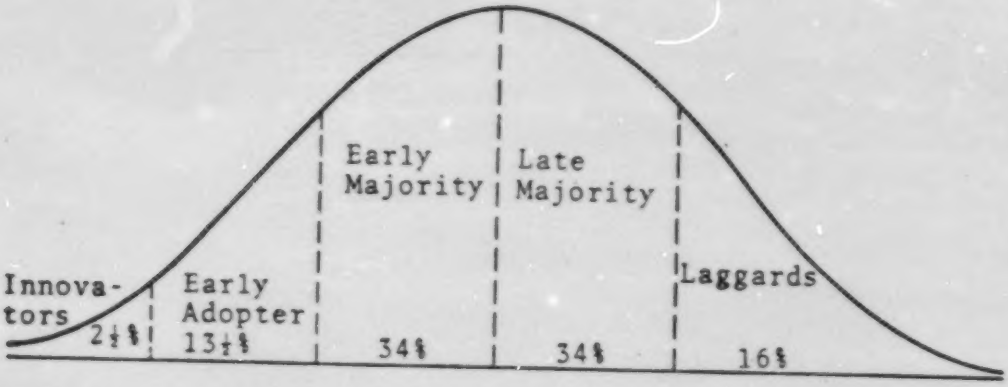

FIGURE I
ADOPTER CATEGORIES BASED ON RELATIVE
TIME OF ADOPTION OF INNOVATIONS

the United States, or any other group you would like to name. The adopter categories and the percentage of the population which each comprises are as follows: innovator, 2 1/2 percent; early adopter, 13 1/2 percent; early majority, 34 percent; late majority, 34 percent; and laggard, 16 percent. Innovators, of course, represent those individuals who are first to adopt an innovation, and conversely, laggards are those individuals who are the last to adopt an innovation.

A major assumption underlying the logic of the change orientation instrument is that those teachers who have the most favorable attitudes toward change (or the highest change orientation) will in all probability be innovators; and at the other extreme, those teachers who have the least favorable attitudes toward change (lowest change orientation) should in all probability be laggards, or those individuals least likely to accept change.

Now as we consider the vocational-technical teacher population in Georgia, let us ask ourselves two basic questions.

1) Which teachers are potential innovators?

2) Which teachers are change oriented and which are not?

If each of us today knew the answers to these two questions we would be in a much better position to work effectively with the teachers in our respective schools, and on a statewide basis, to speed the rate of change in vocational education in Georgia.

What is the Change Orientation Instrument Like?

First, it may be helpful to give you some idea of the types of content that influenced the development of the change orientation instrument. The list below contains the topics of eight attitude "subscales" which went into the development of the instrument. The topics were:

1) Reducing the number of under-prepared people entering the labor market.

2) Meeting the special needs of disadvantaged students.

3) Beginning preparation for employment at an earlier age.

4) Cooperative education.

5) Individualization of instruction and behavioral objectives.

6) Adult education.

7) Team teaching and differentiated staffing.

8) Core vocational curricula.

Each of these eight topics served as the basis for a 30-item (or statement) attitude subscale which was then included in a questionnaire mailed to vocational teachers in 38 states.

Based upon the response of these teachers, 21 of the original 240 statements were statistically selected as the best items to go into the present form of the instrument.

The teachers in the sample were nominated by State Department of Education staffs as being teachers (1) most likely to try new ideas and (2) least likely to try new ideas. These "known groups" then served as the validation groups so that we could determine whether or not these extreme groups of teachers did differ in their attitudes toward change.

We were able to determine quite conclusively that the two "known groups" had markedly different attitudes toward change and that the change orientation instrument did possess highly promising degrees of reliability and validity. A number of other approaches were successfully used to further assure that the instrument was valid. However, I will not attempt to go into those methods at this time.

How Can the Instrument Be Used?

With the necessarily brief explanation I have given regarding the development and the content of the change orientation instrument, let me now discuss with you briefly some possible uses of the change orientation instrument. The uses I will describe to you do not necessarily represent all the possible uses of the instrument. You may be able to think of other applications in your particular setting. However, the uses I will describe should be of interest to nearly all of you since the most effective interpretation and application of change orientation could be obtained if we had the data available on

every vocational teacher in Georgia.

Possible uses of the change orientation instrument are:

1) Identifying potential innovators for launching innovations in vocational education programs.

2) Identifying innovative teachers as sources of new ideas.

3) Selecting teachers for various leadership positions in vocational education.

4) Planning in-service education activities geared to the differing needs of change-oriented and non-change-oriented teachers.

5) Evaluating the effectiveness of in-service education programs for vocational teachers.

6) Identifying teachers who may desire or welcome assistance in changing vocational programs.

In concluding my remarks about change orientation of vocational teachers as a strategy for change in vocational education in Georgia, let me emphasize that the six possible uses of the change orientation instrument just described represent a recommendation that vocational-technical teachers in Georgia be given the change orientation instrument. The data would then be analyzed and interpreted with the expectation that some of you can make one or more uses of the instrument.

Earlier today Henry Brickell emphasized that teachers generally require assistance in changing. Those of you who are or have been involved in in-service teacher education are aware of this need. As long as resources are limited, use of the change orientation instrument could be a most valuable aid in providing assistance in the right places!

STRATEGY II-SELECTIVE DISSEMINATION OF INFORMATION

Now if you will shift with me to Strategy II, consider the notion of "Selective Dissemination of Information to Speed the Rate of Change." Let us concentrate for a time on another possible way of improving our efforts collectively to facilitate change in vocational education.

A comprehensive tool for improving our change efforts is the ERIC system. ERIC is an acronym representing Educational Resources Information Center. This is a mechanism, originated in the U. S. Office of Education, Department of Health, Education, and Welfare, designed to help you find the information you need to do your job.

How Does the ERIC System Work?

The ERIC system contains a collection of research and curriculum materials, as well as other relevant educational documents, submitted by state departments of education, professional organizations, research organizations, universities, and public school systems. ERIC assembles this information through nineteen clearinghouses throughout the United States. The information is channeled into a central system (called ERIC central) which provides the information upon request to you, the consumer.

You ask, "How do I get documents?" As I mentioned a moment ago, the ERIC system obtains documents directly from researchers and other educators preparing information documents (See Figure 2). These documents are in turn submitted to one of the nineteen

clearinghouses which indexes and abstracts the various documents and submits the index information to the Government Printing Office, where the publication of a number of indexes takes place. I will describe these indexes in a few moments. The clearinghouses also send to the ERIC Document Reproduction Service (EDRS) the abstract and complete copy of documents which then go into microfiche form or "hard copy" form.

HOW DO I GET DOCUMENTS?

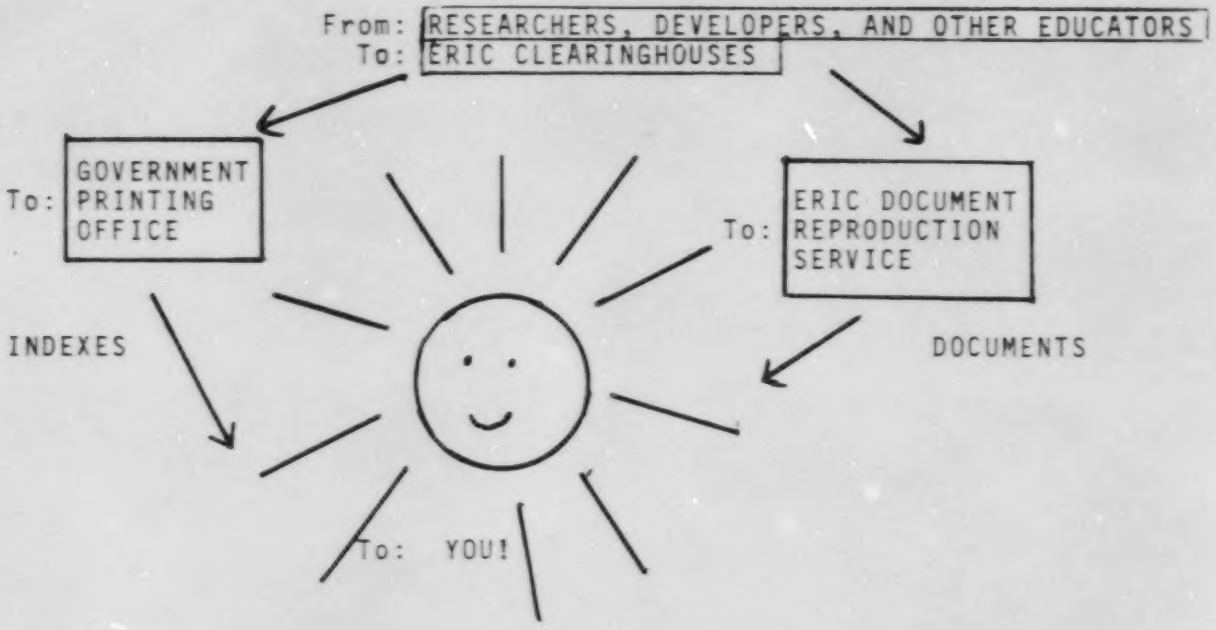

Figure 2.

An Illustration of How Information Gets From Its Source to the Educator

I will also describe in a moment what is contained on microfiche cards, and how they are related to hard copies.

From the indexes published for ERIC and the documents available through EDRS, you, the individual user, identify and obtain documents with relevance to your particular needs. Currently, ERIC documents are increasing in the total ERIC system at the rate of 13,000 to 15,000 documents per quarter. This factor is a good illustration of the need for selective dissemination of information!

What is A Microfiche Card?

I mentioned microfiche cards to you a moment ago. Microfiche is a type of photographic film, measuring approximately four by six inches, which contains images of up to 72 standard size typed pages. The original document is photographically reduced onto the microfiche film and filed so that a user may subsequently pull the microfiche file card of most interest and place it in a microfiche reader for viewing purposes. The microfiche reader projects the page images onto a screen approximately the same size as the originals before they were photographically reduced.

Thus, microfiche cards permit the storage of literally hundreds of documents within the space of a small box, perhaps on the corner of your desk, no longer than eighteen inches. A duplicate microfiche card can be provided to you for only ten cents. Each of you could have at your fingertips a very inexpensive portable microfiche reader, selling for about $90, and a small collection of microfiche cards containing those documents you consider vital to the performance of your job and to the performance of teachers you supervise. In short, all

that is required is a comfortable place to sit with a small microfiche reader and relevant microfiche cards containing documents which meet your needs.

How Can ERIC Indexes Help?

Now let us take a look at a few of the indexes which make up part of the ERIC system for day-to-day users. First is the index, Research in Education (RIE). This is a monthly publication listing documents which have just been placed in the ERIC system. A typical citation in RIE contains several bits of information:

1) An identifying number which begins with the letters "ED" followed by a six digit number
2) Author's(s') name
3) Title of the work or publication
4) Place of publication
5) Number of pages
6) Publication date
7) Availability and cost
8) Key terms or descriptors which suggest the content of the document
9) Finally, a brief abstract of the document which gives the reviewer of the index an idea as to whether or not the complete document should be reviewed, either on microfiche or in hard copy.

A second major index in the ERIC system is Current Index to Journals in Education (CIJE). This index contains a listing of the major educational periodicals, some originating outside the United States, which contain a wide variety of published articles in nearly every field of education.

A number of other indexes for special purposes include Office of Education Research Reports, Pacesetters in Innovation, and Manpower Research indexes. These indexes provide more in-depth literature within certain fields of education. For example, Manpower Research represents a comprehensive combination of research relative to manpower needs and is used extensively by persons responsible for planning vocational education programs.

Two other key indexes of particular interest to vocational educators are those prepared at The Center for Vocational and Technical Education at Ohio State University. These indexes are Abstracts of Instructional Materials in Vocational-Technical Education (AIM) and Abstracts of Research and Related Materials in Vocational-Technical Education (ARM). These indexes are, as the titles indicate, designed to provide vocational educators with the most recent information available on instructional and research materials in the field of vocational-technical education. I hope that they will be regarded by you and your people in the near future as "essential tools" for the vocational educator, whether that person be an administrator or a teacher.

In short, ERIC can help (1) school administrators, (2) teachers, (3) researchers, (4) information specialists, (5) professional organizations, and (6) students. ERIC can help you in your job!

Now for those of you who are more familiar with ERIC, perhaps I should go into some greater detail regarding the

ERIC system. There also exists a publication from ERIC entitled The Thesaurus of ERIC Descriptors which contains a compilation of key words used to describe documents in the ERIC system. These key words are called descriptors, as the title indicates. Descriptors are grouped according to broad and related terms as well as narrower terms. These groupings of terms or descriptors, which indicate the interrelationships existing among various educational terms, are used to define the topic or question for which information is needed.

O.K., How Can ERIC Be Used?

If you are at the stage now of requesting information through the ERIC system, you may obtain information in two forms. One is in the form of microfiche, which was described earlier. These 4" x 6" photographic films contain most of the documents in the ERIC system. Some documents are available from other sources, however, and cannot be obtained in microfiche form. The other major form of document from ERIC is "hard copy," or a document in the original size of the publication. These documents are generally rather expensive because of the high cost of photographic reproductions of the full-sized publication.

The University of Georgia Computer Center can search magnetic tapes of the ERIC system on request. A literature search on a given topic or question is performed by providing the computer a set of key descriptors from the Thesaurus which I have just described. The computer searches the descriptors and produces the complete citation of the documents

as they appear in RIE or CIJE. This capability saves a considerable amount of time in searching for key documents.

Those of you who have sufficient funds in your budgets for instructional materials may be able to order for your own vocational education libraries the indexes I described earlier. These indexes are relatively inexpensive compared to the total budget you administer. With the aid of a few inexpensive microfiche readers, you could have your entire staff making regular and effective use of the ERIC system.

One of the very favorable outcomes from active involvement with ERIC materials is the general tendency to collect a number of hard copy documents to be placed on library shelves. These documents are generally those which are considered of most importance and which will be read frequently by a number of staff members.

In addition to a $90 portable microfiche reader which you could have available for routine reading purposes, there are also more sophisticated machines if you have adequate funds and desire additional features. Some larger machines allow one to read microfiche as well as to produce a full-sized hard copy of the particular page on the screen of the microfiche reader. This type of machine is called a reader-printer and can be obtained for approximately $1,600.

We are now in the process of obtaining one of these reader-printers to begin our selective dissemination system center at the University of Georgia. We also will be obtaining machines which can develop and print duplicates of microfiche

cards. Our plan is to provide microfiche duplicates on request to those persons who have access to microfiche readers so that they may optimize the number of documents which may be bought with a fixed amount of money. As I indicated, microfiche duplicates cost ten cents each and are much cheaper to copy than a document reproduced in hard copy form.

CONCLUSION

The time allotment today made it impossible for me to go into great detail on either of the two strategies for change in vocational education in Georgia which I have presented. Hopefully, the information presented has been sufficient to give you the general ideas and perhaps to lay the groundwork for more detailed information later.

In keeping with the theme of today's conference, we have a paramount need to get on with the business of improving our skills as change agents. In spite of the progress we have made in Georgia, it is evident that a gap does exist between "what is" and "what should be" almost anywhere we look in vocational education. I doubt that any of you would claim to have "perfect" programs in your schools. I look forward, as I am sure you do, to the challenges and opportunities ahead of us.

Reader Note: At the conclusion of this presentation, conference participants completed an evaluation form on the two strategies of "change orientation" and "selective dissemination of information." A copy of the form appears in Appendix B. The results of the survey appear in Appendix C.

KEY ELEMENTS FOR CHANGE IN VOCATIONAL EDUCATION IN GEORGIA: A SYNOPSIS

by

Gene Bottoms*

For a few moments let us consider some of the elements for change that are taking place in vocational education in Georgia. I really do not know of any other state across the country that is making more relevant changes in vocational education than we are here in Georgia. I say that with all humility. I have seen what is going on in many of the other states and I think one would have to go a long way to find a better program than we have in this State. And our program is still improving!

There are four main elements I want to talk about briefly. First, it seems to me that there must be compelling reasons for change. I think we have some reasons in Georgia. Second, I want to discuss the necessity for a climate for change. We have some of that climate, we might need more. Third, I think that change in a state's educational system must have a sound historical base. Later, I will review with you

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*At the time of this address, Dr. Bottoms was Associate State Director, Vocational Education--Leadership Services, Georgia Department of Education. He is now Director, Division of Program and Staff Development, Office of Instructional Services, Georgia Department of Education, State Office Building, Atlanta, Georgia 30334.

very briefly some of the history of change as it has occurred in Georgia. Then fourth, you can talk about change all you want, but we need to set something in motion that promotes more change. I have three proposals to present to you in regard to this fourth element.

REASONS FOR CHANGE

In terms of reasons for change in vocational education, the following comes to mind. One might continue to consider change in vocational education to produce a better prepared graduate. That graduate must be more in tune with today's manpower needs. Manpower needs, in and of themselves, represent one reason for change. In Georgia, we still have some major gaps between the outputs of our vocational education programs and the manpower needs of our State. That gap is being closed, but nonetheless it still exists today.

In addition to producing better students, other reasons for change include making more effective use of available resources and providing more services to more students. Currently, we do not have the money for the latter. We will not get enough money in the near future. Hopefully, however, we can receive more than we are now getting. This means better use has to be made of present facilities and resources. We still have half of our people not completing high school. We have approximately 30 percent of our high school seniors leaving school without some kind of entry-level job skill. Only about 25 percent of those who finish

high school go on to post-secondary education and, only about 25 percent of the youngsters at the junior high school level in this State have access to two years of exploratory pre-vocational education. Therefore, there are still a large number of unmet needs in Georgia Vocational Education.

Making learning experiences more meaningful to students is another reason for change. This reason for change often comes about because somebody wants you to improve instruction. A recent action by the State Board of Education said to the local school systems, "If you are going to get construction funds from the State, then you will have to teach in that newly constructed facility the recommended state curriculum." The Board further expressed a desire for all schools being built under these construction funds to have a comprehensive curriculum. Now that has some impact in terms of change. I have been amazed at the number of systems that are now planning to do some of the things that they had not considered at all in the recent past.

Legislation provides us with still additional reasons for change. Much of our concentration on disadvantaged and handicapped students in this State goes back to the 1968 Amendments for Vocational Education. The Amendments mandated that we must broaden the definition and the objectives of vocational education. The Amendments include such new items as basic education skills, exploration experiences, more assistance in making decisions about career education options, and student placement. That kind of legislation not only

promotes but actually forces change.

The last reason for change, in my opinion, is psychological. People must stay involved. They must be constantly rethinking their role and actively seeking ways to improve their performance. Permit me to tell a personal story to illustrate this point.

My first job in the State in vocational education was with a man I respected as a very excellent vocational administrator. He made a point very clear to me the year I was with him. He said, "Every year I want an activity going on in my school that involves my teachers in improving what they are doing." He very much believed that teachers continually need to be involved in updating and revising. This needs to be continuous or they lose the cutting edge--they lose motivation. He thought that just to rethink what you were doing was essential. These are some of the reasons I offer in support of change.

CLIMATE FOR CHANGE

There has to be a climate for change. Part of that climate is promoted by some risk capital in the form of new money for which you relax an existing regulation; and, believe it or not, the State does relax regulations now and then! A couple of examples of the grants for the disadvantaged and handicapped in post-secondary schools will illustrate the point. I recall two directors, Ben Brewton from Macon and Durward Powell from Rome, who said, "We don't want to put in

this canned package you are handing us from the State Office. We want to try something different." We said, "Okay, tell us what you want to do and how you are going to get at your problems." Each came in with a systematic plan for his school. They said, as could all systems within the State who have received special grants at the secondary level, "Here is what we think will work."

You often tell us that State recommendations do not fit your local situations. So, you redefine the processes you would use to accomplish some different objectives and to serve a broader range of youngsters. You have the potential, and the climate exists that will allow this to happen.

Two recent projects utilizing risk capital certainly indicate that there is a receptive climate for change in Georgia. One of the most successful I know of was the use of risk funds to help install the World of Construction curriculum at the junior high school level. Also, recent work by the Lockheed-Georgia Company to develop a rather detailed piece of instructional material for our machine shop program is a fine example of the use of risk capital to promote change. I think there is a climate for change. Maybe the climate is not what we would all have it to be. It is not always what I would have it to be at the state level, but it does exist. We are able, in many ways, to see the results of it.

In order to create a climate for change, there must be some new ideas available. There must be a vehicle for getting these ideas to teachers. Our staff development effort has

been a very good vehicle for training teachers to use new innovations. For example, the kind of work that John Lloyd, State Supervisor of Technical Education, has done over the last year and a half to introduce new ideas in individualized instruction has begun to pay off in the post-secondary schools. In the Ninth Congressional District five high school faculties participated in two in-service programs designed to familiarize them with new ideas. Several of the administrators indicated to me that as a result of these workshops their teachers were planning to use these new approaches in their classrooms. This concept produces a teacher-to-teacher sharing of ideas. Staff development, then, provides us with a good vehicle for getting new ideas into the classrooms.

In order for change to take place, and this has been said several times today, local systems, state, and university staffs all need assistance in attempting to adapt to new changes and innovations. From the projects for the disadvantaged and handicapped at both the secondary and post-secondary level, many of you have had enough funds left in the budgets to bring in special consultants to help you adopt and properly install certain changes. When the resources were not available within the State, you were able to use some of the money to go outside the State to purchase the consultants you needed.

As an example, I would like to review for you Ben Brewton's method of project enrichment. Most of his funds have been used for staff development. In order to be an expert in hiring consultants, you first have to know exactly <u>what</u>

you want them to help you do and be able to provide some ideas about the kind of aid you want from them. The most common practice, however, is to have an in-service program after school with a speaker who flies in, flies off, and flies out! That is not utilizing expertise at all. Ben Brewton, on the other hand, in using a consultant, chose one that he felt could help him develop his special project, not just make speeches to his staff. He had the consultant stay in his school for a full week, work directly in the laboratory with teachers, and then meet with them after school to look at new methods of doing the job better. Incidentally, this was the process that the vocational administrator I mentioned before was using ten years ago in the State. I think this is a very effective usage of consultant time!

Many of you in this room have projects with available funds and budgets for staff development. As long as you invite me to come in and make a speech or you hire someone from the University or from out-of-state to make a speech, you are probably wasting your money. In order to properly use expertise, get someone who has enough commitment to come into your school and spend a period of time with you and your faculty. Bring the person back in two months to spend more time in the school. This will give your faculty time to digest what the consultant said and to raise questions of their own.

Many local system administrators call me and say they want me to make a speech. I ask, "For what purpose? What are you trying to accomplish?" "Oh, we have an in-service after school and we want you to come and talk." If you can not define your needs better than that, the problem is even more severe! You have to have some developmental money. Spend some of it for an assessment of your needs. That is a very good way to create a climate for change.

It seems to me that administrators operate almost in competition with past years. Lee Leverette, Director of Marietta-Cobb Area Vocational-Technical School, said to me the other day that he had 105 companies in for TECHDAYS this year, as compared to 80 last year. Lee is one administrator who keeps a record of what he did last year, and always tries to improve the next year. Since he had 105 companies this year, I suspect he wants 110 next year. The point I am trying to make, as are administrators at all levels, is that we need to continue to look for better ways of doing our job each year.

We do have a problem unless we listen to each other. Believe it or not, the State staff listens to the local staff, local to State and University, and vice versa. It seems we do have a dialogue on change in Georgia. This dialogue alone is an enrichment to our climate for change. It is most important that we maintain it.

HISTORY OF CHANGE

Historically, especially in the recent past, Georgia has

a significant history of change. Briefly, allow me to identify for you some of the changes that are now taking place in the State. If you have not seen some of these programs you will want to visit each of them. There are many schools that have some excellent examples of individualized instruction. The concept of differentiated staffing is being implemented in Coosa Valley Vocational-Technical School and this concept has brought about a number of additional changes in the school's program. Some of you also have some independent study efforts in your schools that allow students to obtain course credits for activities outside the school. The cluster curriculum, the mini pre-vocational courses, the new consumer education projects that are being installed this coming year, the advanced placement that exists in some schools, the interdisciplinary activities in many high schools-all are excellent examples of our ability to utilize innovations.

I have found one technical school making excellent use of team teaching in the business education department. The math teacher and office machines teacher work together. Math is being taught as if it were to be used on the office machines. Occupational home economics is another area where major change has been taking place. Those in agricultural education are creating a balance in their curriculum between production agriculture and off-farm agricultural occupations. This has been a change that they have worked very hard to install.

One thing that we have going for us this summer (to some extent before) is an institution-to-institution program of staff development. The U. S. Office of Education is now talking about promoting this concept. The idea is simply this: you cannot do much to change a school by just dealing with one teacher in that school. The only way you can change a school is for the University and State staff to work with the total staff of the school. I think this is a point Henry Brickell and Neal Gross made this morning. During this summer, 55 clusters of schools will receive the direct assistance of the Universities.

I also have a list of some things I do not see enough of in Georgia. You may not agree with all these but they do represent some concepts I think we should be implementing. This is my list; I am sure you could add others.

1) I do not see any performance-based teaching. I do not see performance testing of many students except in practical nursing and cosmetology. I do not really see much being done to determine if students measure up to certain performance levels when they finish programs.

2) I see very little use being made of what students say about their program; such information is not being recycled into improvement through follow-up studies.

3) I really do not see teachers being involved in identifying and solving problems.

4) I do see some flexible time schedules and use of facilities, but I do not see enough. I still see many facilities not being fully utilized.

5) I do not see enough team teaching.

6) I do not see enough effort in the classrooms to teach a problem solving approach to learning.

7) I do not see people judging teachers by the quality of students they produce.

8) I do not see administrators spending adequate time in classrooms to see what their instructors are doing.

9) I do not see enough emphasis, as Neal Gross said this morning, on managing the schools, or at any level of management, to rearrange the resources to do the job differently. For the most part, I see an administration approach that has to do with operating the school and not managing it.

10) I would like to see more Carnegie unit credits given for home and community learning activities.

11) I would like to see more individualized instruction. I would like to see more student centered instruction.

12) I would like to see a performance based certification particularly for teachers. I would like to see us moving away from counting courses to putting more emphasis on whether the teacher can do the job rather than pointing out they have had certain courses.

13) We need more emphasis on developmental activities in curriculum areas and more emphasis on testing material before trying to implement it.

14) I would like to see more articulation between secondary and post-secondary schools. We have one cluster of schools in the northeastern part of the State that has worked out an excellent articulation pattern.

15) I would like to see more interdisciplinary activities.

16) I would like to see, at the secondary level, all teachers beginning to relate their subject matter to the world of work.

17) I would like to see more emphasis on updating the curriculum content to keep in tune with the changes that are occurring in the job market.

18) We need more emphasis on job placement.

PROMOTING MORE CHANGE

In closing I have three proposals that hopefully will promote change. The first two I doubt you will take very

seriously, but I am very serious in offering them. First, I propose, and I will be the first one to volunteer for this, that the state and local administrators and the teacher education staff switch roles for at least three days each year. I think if I had to look at what you have to do in your setting, I would have many different insights at the state level than I presently have. I think if you had to sit where some people at the state level have to sit that you would have a different perspective as well.

Secondly, I propose that every vocational administrator be a student on three different occasions each year in his school for a full day each occasion. I am convinced that would do more to improve the quality of the present program than any other one thing. I suggest, for example, that he be a machine shop student one day. He would select the student that he wanted to be and do everything the student would do that day. It seems the administrator would gain some insight into how that instructional program and the general policies of the school could be improved. I suggest that two months later he might spend a day in another course, say in the automotive lab, and two months later in another program. By viewing what is going on in the school from the student's viewpoint, it would improve instruction, administration, guidance, and the school program as a whole.

The third proposal that I offer can be easily delivered. It regards out-of-state travel. I propose, recognizing that we do have limited State funds for travel, that we set up

a certain amount of research funds which vocational administrators or teachers can draw upon if they know about an outstanding, innovative program they would like to visit and study for the purpose of installing it in their school. I propose that the State support and pay their travel expenses to visit that program to determine what implications it has for their schools.

Those are my three proposals. Think about the staff exchange plan. Go home and become a student for a day. Plan a visit to bring home an innovative idea for your school system. Above all, plan for improvement in your total vocational education program.

APPENDIX A

PRE-CONFERENCE RESOURCE PAPER FOR PARTICIPANTS

"EDUCATIONAL CHANGE -- A Strategy for
Study and Action," by John I. Goodlad.
National Elementary Principal, December, 1968.

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APPENDIX B

QUESTIONNAIRE-RESPONSES TO "STRATEGIES FOR CHANGE IN VOCATIONAL EDUCATION IN GEORGIA"

RESPONSES TO "STRATEGIES FOR CHANGE
IN VOCATIONAL EDUCATION IN GEORGIA"

Please check the following items:

1. My professional position is:

   ____Local Director of Vocational Education

   ____Director of Area Vocational Technical School

   ____Vocational Supervisor of Area Vocational High School

   ____State Staff Member, Division of Vocational Education

   ____University Staff Member in Vocational Education

   ____Other (specify) _____

2. Grade levels of students for which I have responsibility include (check as many as appropriate):

   ____kindergarten

   ____elementary

   ____junior high

   ____senior high

   ____post secondary (13-14)

   ____undergraduates in college

   ____graduate students

   ____out-of-school adults

3. Number of teachers responsible to you: ____

4. Change Orientation of Vocational Teachers — Circle One Choice

	Least Useful				Most Useful
A. Degree of usefulness of vocational teacher change orientation information statewide in Georgia	1	2	3	4	5

B. Degree of usefulness of vocational teacher change orientation information to me in my job — 1 2 3 4 5

C. Critical comments, questions, or suggestions regarding usefulness of change orientation of vocational teachers data:

1.

2.

3.

5. Selective Dissemination of Information — Circle One Choice

	Least Useful				Most Useful
A. Degree of usefulness of a system for selective dissemination of information statewide in Georgia	1	2	3	4	5
B. Degree of usefulness of a system for selective dissemination of information to me in my job	1	2	3	4	5

C. Critical comments, quertions, or suggestions regarding usefulness of a system for selective dissemination of information:

1.

2.

3.

D. In what areas (topics) do you now have the greatest need for information? (for example, "Reading problems of the disadvantaged.")

1.

2.

3.

4.

APPENDIX C

SUMMARY OF QUESTIONNAIRE DATA

N	POSITION	Grade level responsibility								Avg. no. of teachers resp. for	Degree of usefulness of change orientation information		Degree of usefulness of a system for dissemination	
		K	E	Jr	Sr	PS	Un Gr	Gr. St.	Out of Sc Adt		Statewide	In my job	Statewide	In my job
12	State staff Div. of Voc. Ed.		3	9	11	3			5	115	3.77	3.92	4.00	4.08
5	University staff member			1	1	1	2	4		262	4.20	4.0	4.0	4.0
15	Local Director of Voc. Ed.	5	12	12	14	8			7	82	3.87	4.00	4.13	4.4
31	Vocational Supervisor Area Voc. H.S.		6	14	30	1			10	16	3.84	4.03	4.29	4.26
13	Director Area Voc. Tech. School			1	1	13			5	41	3.77	3.92	4.46	4.42
7	Other	1	3	5	5	2				34	4.4	4.0	3.86	3.86
83	← Grand Total	Grand means →								62.5	3.89	3.99	4.19	4.23

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